

#### DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS

47123 BUSE ROAD, UNIT # 7
NAVAIRINST 5090.2

AIR-8.0 3 Aug 98

### NAVAIR INSTRUCTION 5090.2

From: Commander, Naval Air Systems Command

Subj: OZONE DEPLETING SUBSTANCES POLICY

Ref:

(a) ASN (RD&A) memo of 13 Nov 97

(b) NAVAIRNOTE 5090 of 21 May 93(c) Sec 326 FY 93 DoD Appropriation

(d) CNO ltr Ser 451I/5U597647 of 11 Sep 95

(e) COMNAVAIRSYSCOM memo of 26 Aug 92

(f) USD (A) memo of 11 Aug 92

Encl:

(1) Class I Ozone Depleting Chemical Agents

(2) Class I Ozone Depleting Substance Review

- 1. <u>Purpose</u>. This instruction prescribes guidance reflecting references (a) through (c). Naval Air Systems Command (NAVAIR) policy limits the use of Ozone Depleting Substances (ODS) in procurements and acquisitions. This instruction must be followed to obtain approval for procurements and acquisitions that require ODS use. This instruction is mandatory for all members of the Naval Aviation Systems Team (TEAM).
- 2. Applicability. These policies and procedures apply to all TEAM members. This includes the Naval Air System Command Headquarters (NAVAIRHQ), its Naval Air Warfare Centers (NAVAIRWARCENS), the Naval Aviation Depots (NAVAVNDEPOTS), the Naval Inventory Control Point (NAVICP), and those activities receiving TEAM support under operating agreements, such as Naval Aviation Program Executive Offices (PEOs). Reference (a) impacts all contracts, including Foreign Military Sales (FMS) contracts, purchase orders, leases, delivery orders, purchases made by the TEAM on behalf of other agencies, and TEAM requirements procured through other agencies. Reference (d) precludes access to the Department of Defense (DoD) ODS reserve by FMS customers, but these procedures must still be followed for FMS contracts.
- 3. <u>Background</u>. The Montreal Protocol and the Clean Air Act Amendments of 1990 have sought to gradually reduce and ultimately eliminate the emission of ODSs into the atmosphere. On February 11, 1992, the President announced the acceleration of the production phase out of Class I ODSs. As a result, production of Halons in the U.S. was halted in December 1994 and production of all other Class I ODSs ceased in December 1995. To ensure that enough ODSs would be available for use in mission-critical military applications, the ODS Reserve was established by the Office of Secretary of Defense per reference (f). Reference (d) eliminates access to this reserve by any FMS customers. Since the production cessation of Class I ODSs, the DoD supply of ODSs is limited to the current reserves, which will be exhausted in 2028 at the current consumption rate. Reference (a) imposes additional requirements upon the Department of the Navy (DoN) regarding the

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purchase of equipment/systems containing ODSs beyond previously issued guidance.

4. Policy. Reference (e) established official NAVAIR policy regarding the use of ODSs in naval aviation programs and operations. The Navy's challenge is to maintain readiness and safety while aggressively implementing a program to eliminate dependence on ODSs. The DoD maintains a stockpile of ODSs for use in mission critical applications only, to bridge the timeframe until suitable alternative substances become available. NAVAIR will incorporate design and procedural changes to eliminate non-essential ODS uses. NAVAIR will use the DoD ODS stockpile responsibly, in mission critical applications only. NAVAIR will invest in demonstration and validation of suitable alternative substances to ODSs and incorporate these substances into future weapons system designs.

#### 5. Definitions

- a. Ozone Depleting Substance (ODS). Any substance listed under 42 U.S.C. Section 7671a(a) (Clean Air Act). A list of Class I ODSs is provided as enclosure (1).
- b. Appropriate Technical Representative (ATR). An individual who has sufficient technical experience and knowledge to provide a competent certification. For PEO and the Deputy Commander for Acquisition and Operations (AIR-1.0) contracts the ATR will be the cognizant class desk. Assistant Commander for Research & Engineering Department (AIR-4.0); Commander, Naval Air Warfare Center Aircraft Division (COMNAVAIRWARCENACDIV); Commander, Naval Air Warfare Center Weapons Division (COMNAVAIRWARCENWPNDIV); Commander, Naval Air Warfare Center Training Systems Division (COMNAVAIRWARCENTSD); Naval Aviation Depot (NAVAVNDEPOT) Commanding Officers; Commanding Officer, NAVICP will designate the ATR for contracts requiring review.
- c. <u>Senior Acquisition Official (SAO)</u>. An official at a level no lower than a general or flag officer or member of the Senior Executive Service (SES) within the requiring activity or the requiring activity chain of command, e.g., for Program Manager Air (PMA) the SAO will be the cognizant PEO or AIR-1.0.
- d. <u>Suitable Substitute</u>. A suitable substitute material or technology is one which has been tested, evaluated and approved by competent authority for use in a specific process or application and is economically, logistically and politically feasible for use in that process or application.
- e. <u>Written Determination</u>. A determination made in writing by the SAO that a suitable alternative substance or technology for a Class I ODS is not available for use in a contract that is under evaluation. A competent team designated to advise the SAO may prepare this determination, however, signature authority may not be delegated.

- f. Requirements Package. A package that includes all relevant material to ensure that a reasoned decision can be made by the chain of command. This includes documentation such as point papers, the DoD ODS reserve impact analysis, a trade-off analysis, a phase-out plan, the ATR technical review and any other supporting documentation.
- 6. <u>Discussion</u>. This NAVAIR instruction updates applicable guidance for those situations where ODS use is necessary due to technical, economic, logistical or political reasons. By following the delineated procedures, the TEAM decisions will be reasoned, thorough, and in compliance with regulations and policy governing ODS use. Prior guidance established a waiver process for incorporating an ODS requirement into a new contract. New guidance requires additional coordination including an impact analysis on the ODS reserve, an N8 generated trade off analysis, and a Plan of Action and Milestones (POA&M) to eliminate the dependence of a system on ODSs.

This instruction applies to Procurement Initiation Documents (PIDs) for new awards and modifications being processed by, and those requirements under development but not yet delivered to, Assistant Commander for Contracts (AIR-2.0), or other contracting organizations. Requirements personnel and program managers must coordinate their work with Procuring Contracting Officers (PCOs) to ensure that proper review procedures are followed for all PIDs.

The ATR shall review all PIDs to ascertain if a PID requires the use of a Class I ODS or contains a requirement that can be met only through the use of such a substance. PIDs currently held by PCOs or contracting organizations are required to comply with this instruction as are those that are currently being developed but not yet delivered to PCOs or contracting organizations.

If a PID requires the use of a Class I ODS or contains a requirement that can be met only through the use of such a substance, the ATR must determine if a suitable substitute material or technology is currently available. If a suitable substitute is available, the requirement must be modified to necessitate the use of that substitute. If a suitable substitute is not available, then the ATR must certify such to the SAO as described in paragraph 7. If the SAO determines that the PID's requirements are mission-critical, necessitate the use of a Class I ODS and signs a waiver for that ODS use, then the PID may be processed with the Class I ODS requirement. Otherwise, the PID shall be modified to eliminate the requirement for use of a Class I ODS.

# 7. Technical Review and Approval Procedures

a. For all new awards, modifications, amendments or extensions, the ATR shall review the PID to determine if the use

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of a Class I ODS is required. If the use of a Class I ODS is a requirement of the acquisition, the ATR must then investigate whether a suitable substitute material is available. For those PIDs where ODS use is either specified or required and for which a suitable substitute does not exist, the ATR shall:

- (1) Coordinate with other stakeholders within the NAVAIR community, Shore Station Management Department (AIR-8.0), Assistant Commander for Logistics (AIR-3.0), AIR-4.0, and Procurement and Configuration Management Support Department (AIR-1.3), in order to provide the SAO with a fully researched recommendation.
- (2) Coordinate with AIR-8.0 to generate an impact analysis of this use of a Class I ODS on the DoD ODS reserve.
- (3) Develop a requirements package (including the impact analysis) to be submitted to Chief of Naval Operations (CNO), (N8) for a trade-off analysis and to CNO (N4) for Reserve tracking per requirements of reference (a).
- (4) Coordinate with the Program Manager to generate a POA&M to eliminate, moderate, reduce or mitigate the impact of that use of a Class I ODS.
- (5) Provide technical certification for the use of a Class I ODS by completing enclosure (2).
- b. The signed technical certification, including the impact analysis, trade-off analysis and any requirements package documentation is then forwarded to the SAO for the procurement (i.e., PEO; AIR-1.0; AIR-4.0; AIR-6.0; Commander, NAVAIRWARCENWPNDIV; Commander, NAVAIRWARCENACDIV; Commander, NAVAIRWARCENTSD; Commanding Officer, NAVICP). The SAO shall provide written determination that the contract may be executed with a Class I ODS requirement. Signature authority may not be delegated. A copy of the final approval and all related documentation shall be forwarded to the Subsystems Division (AIR-4.3.5) and AIR-8.0.
- c. The approval package, including SAO approval, must be forwarded with the PID to the contracting organization for processing. A PID requiring the use of a Class I ODS cannot be processed without the SAO determination based on the ATR's certification stating that a Class I ODS is required, but no suitable substitute is available.

#### 8. Responsibilities

a. Each SAO granting an approval authorizing the use of a Class I ODS shall provide a copy of the signed waiver to AIR-8.0 for inclusion in an annual ODS report to Assistant Secretary of the Navy (ASN) (Research, Development and Acquisition (RD&A)) as required per reference (c).

- b. AIR-1.3 must ensure that modifications of systems/equipment requiring a Class I ODS are supported by SAO approval.
- c. AIR-4.3.5 will provide assistance as the NAVAIR technical authority for specifications, standards, state of the art technical feasibility, and overall ODS use to the TEAM.
- d. Program managers are expected to budget for ODS substitute requirements, and may have to trade-off other procurement actions to fund this effort.
- e. Program managers and ATRs are responsible for following this instruction for every contract action.
- f. PCOs are responsible for ensuring that all required approvals have been received before a contract can continue.
- g. AIR-8.0 is responsible for providing technical assistance with ODS regulations, assisting the ATR in compiling a requirements package with input from appropriate NAVAIR stakeholders, and submitting an annual ODS report for NAVAIR to ASN (RD&A).
- 9. Review. AIR-8.0 shall review annually the contents herein and recommend changes or deletions to the Commander.

MICHAEL B. DEITCHMAN

By direction

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# CLASS I OZONE-DEPLETING CHEMICAL AGENTS

| Common Name or<br>Chemical Formula | Chemical Name                  | CAS Number             |
|------------------------------------|--------------------------------|------------------------|
| Group I                            |                                |                        |
| CFC-11                             | Trichlorofluoromethane         | 75-69-4                |
| CFC-12                             | Dichlorodifluoromethane        | 75-71-8                |
| CFC-113                            | 1,1,1-Trichlorotrifluoroethane | 354-58-5               |
|                                    | 1,1,2-Trichlorotrifluoroethane | 76-13-1                |
| CFC-114                            | Dichlorotetrafluoroethane      | 76-14-2                |
| CFC-115                            | Monochloropentafluoroethane    | 76-15-3                |
| Group II                           |                                |                        |
| Halon 1211                         | Bromochlorodifluoromethane     | 353-59-3               |
| Halon 1301                         | Bromotrifluoromethane          | 75-63-8                |
| Halon 2402                         | Dibromotetrafluoroethane       | 457-73-2               |
| Group III                          |                                | 75-72-9                |
| CFC-13                             | Chlorotrifluoromethane         | 354-56-3               |
| CFC-111                            | Pentachlorofluoroethane        | 76-12-0                |
| CFC-112                            | Tetrachlorodifluoroethane      |                        |
| CFC-211                            | Heptachlorofluoropropane       | 422-78-6               |
| CFC-212                            | Hexachlorodifluoropropane      | 3182-26-1<br>2354-06-5 |
| CFC-213                            | Pentachlorotrifluoropropane    | 29255-31-0             |
| CFC-214                            | Tetrachlorotetrafluoropropane  | 1599-41-3              |
| CFC-215                            | Trichloropentafluoropropane    | 661-97-2               |
| CFC-216                            | Dichlorohexafluoropropane      | 422-86-6               |
| CFC-217                            | Chloroheptafluoropropane       | 422-86-6               |
| Group IV                           |                                |                        |
| CCl <sub>4</sub>                   | Carbon tetrachloride           | 56-23-5                |
| Group V                            |                                |                        |
| Methyl Chloroform                  | 1,1,1-trichloroethane          | 71-55-6                |
| Group VI                           |                                |                        |
| CH <sub>3</sub> Br                 | Methyl Bromide                 | 74-83-9                |

# CLASS I OZONE-DEPLETING CHEMICAL AGENTS

| Common Name or<br>Chemical Formula | Chemical Name                  | CAS Number |
|------------------------------------|--------------------------------|------------|
| Group I                            |                                |            |
| CFC-11                             | Trichlorofluoromethane         | 75-69-4    |
| CFC-12                             | Dichlorodifluoromethane        | 75-71-8    |
| CFC-113                            | 1,1,1-Trichlorotrifluoroethane | 354-58-5   |
|                                    | 1,1,2-Trichlorotrifluoroethane | 76-13-1    |
| CFC-114                            | Dichlorotetrafluoroethane      | 76-14-2    |
| CFC-115                            | Monochloropentafluoroethane    | 76-15-3    |
| Group II                           |                                |            |
| Halon 1211                         | Bromochlorodifluoromethane     | 353-59-3   |
| Halon 1301                         | Bromotrifluoromethane          | 75-63-8    |
| Halon 2402                         | Dibromotetrafluoroethane       | 457-73-2   |
| Group III CFC-13                   | Chlorotrifluoromethane         | 75-72-9    |
| CFC-13<br>CFC-111                  | Pentachlorofluoroethane        | 354-56-3   |
| CFC-111                            | Tetrachlorodifluoroethane      | 76-12-0    |
| CFC-211                            | Heptachlorofluoropropane       | 422-78-6   |
| CFC-212                            | Hexachlorodifluoropropane      | 3182-26-1  |
| CFC-213                            | Pentachlorotrifluoropropane    | 2354-06-5  |
| CFC-214                            | Tetrachlorotetrafluoropropane  | 29255-31-0 |
| CFC-215                            | Trichloropentafluoropropane    | 1599-41-3  |
| CFC-216                            | Dichlorohexafluoropropane      | 661-97-2   |
| CFC-217                            | Chloroheptafluoropropane       | 422-86-6   |
| Group IV                           |                                |            |
| CCl <sub>4</sub>                   | Carbon tetrachloride           | 56-23-5    |
| Group V                            |                                |            |
| Methyl Chloroform                  | 1,1,1-trichloroethane          | 71-55-6    |
| Group VI                           |                                |            |
| CH <sub>3</sub> Br                 | Methyl Bromide                 | 74-83-9    |
| L                                  | 1 4                            |            |

# CLASS I OZONE DEPLETING SUBSTANCE (ODS) REVIEW

| Program Name   |
|--|
| Contract/Procurement Request No.   |
| SECTION A Technical Certification (Complete as appropriate)  |
| A.1 This contract/procurement does not require the use of a Class I ODS, or contain requirements that can be met only through the use of such a substance.   |
| A.2 This contract/procurement requires the use of Class I ODS(s) for:  |
| ODS(s) USED EST. QUANTITY (LBS)  |
| Refrigeration  |
| Fire Fighting  |
| Cleaning/Manufacturing Process   |
| Other  |
| A.2.1 There is/are no suitable substitute(s) currently available for the Class I ODS use(s) identified above.  |
| Appropriate Technical RepresentativeDate   |
| SECTION B (Complete as appropriate)  |
| The following information is attached:   |
| B.1 An impact analysis of the use of Class I ODS(s) covered by this approval on the DoD ODS Reserve.   |
| B.2 A trade-off analysis of the use of Class I ODS(s) covered by this approval on cost, schedule, performance, operational requirements, and the finite DoD ODS Reserve performed by CNO (N8).   |
| B.3 Technical Certification for the use of Class I ODS(s) covered by this approval.  |
| B.4 A Plan of Action and Milestones to eliminate/address the use of Class I ODS(s) covered by this approval.   |
| 8.5Other   |
| Program Acquisition ManagerDate  |
|  |
| SECTION C (Complete Section C.1 or C.2 as appropriate)   |
| C.1 Based on the appropriate technical representative's and the Program/Acquisition Manager's assessments, I have determined a suitable substitute for the Class I ODS(s) indicated above is being implemented in accordance with the most prudent schedule. The use of a Class I ODS(s) during the transition period is approved. |
| C.2 Based on the appropriate technical representative's and the Program/Acquisition Manager's assessments, I have determined a suitable substitute material(s) for the present Class I ODS(s) indicated above is not currently available, and the use is approved for this acquisition.  |
| Senior Acquisition OfficialDate  |
| Copy to:   |

Contract File ATR File AIR-8.0 File AIR-4.3.5 File